



~~MAC~~  
\$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**Hashemi, et al.**

Serial No.: 09/878,815

Filed: June 11, 2001

For: **Structure and Method for Fabrication  
of a Leadless Chip Carrier**

Art Unit: 2811

Examiner: Owens, Douglas W.

**PETITION TO REVIVE UNDER 37 CFR §1.137**  
**IN RESPONSE TO NOTICE OF ABANDONMENT**

Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

This is a petition to revive under 37 CFR §1.137 in response to the Notice of Abandonment dated April 7, 2004 in the above-referenced patent application.

Alternatively, this is a request for withdrawing any holding of abandonment of the present application since, as illustrated below, the present application was abandoned through no awareness or fault of the Applicant.

05/11/2004 SLUANG1 00000019 09878815

01 FC:1452

110.00 0P

**I. Applicant Respectfully Requests Revival Under 37 CFR §1.137(a)**

37 CFR §1.137(a)(1):

A timely reply to the Final Office Action dated September 17, 2003 was filed on December 17, 2003 and was received and the postcard stamped by the USPTO on December 22, 2003 (see Exhibit A). The timely filed reply to the Final Office Action was subsequently lost or misplaced by the PTO and, in response to a telephonic request by the Examiner, was re-submitted to the PTO by the Applicant on March 12, 2004. Further, Applicant received an Advisory Action dated April 1, 2004 and has enclosed herein a reply to the Advisory Action and an RCE transmittal (see Exhibit B).

37 CFR §1.137(a)(2):

Applicant submits herewith a "Payment by Credit Card" form (PTO-2038) in the amount of \$110.00 as the required fee under 37 CFR §1.17(l). The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 50-0731.

37 CFR §1.137(a)(3):

The entire delay in filing the required reply from the due date for the reply until the filing of this petition was unavoidable for the following reasons:

Applicant filed a timely reply to the Final Office Action dated September 17, 2003 on December 17, 2003 and received the postcard stamped by the USPTO on December 22, 2003 (see Exhibit A). Thus, the PTO received Applicant's reply to the Final Office Action well before the six-month deadline of March 17, 2004. As a result of

having received verification of Applicant's timely reply to the Final Office Action by receipt of the postcard stamped by the PTO, Applicant was reasonably expecting a PTO reply in the form of a Notice of Allowance or a timely Advisory Action. Furthermore, Applicant had no indication and, consequently, was unaware that a Notice of Allowance or a timely Advisory Action would not be forthcoming from the PTO.

On March 11, 2004, Applicant received an initial voice message from the Examiner notifying the Applicant that the PTO has not received a reply to the Final Office Action, which was timely filed by the Applicant on December 17, 2003. Thus, through no fault of the Applicant, Applicant's timely response to the Final Office Action was lost or misplaced by the PTO. In response to a follow up telephone conference with the Examiner on March 12, 2004, the timely filed reply to the Final Office Action was re-submitted to the PTO by the Applicant on the same day, i.e. on March 12, 2004. In a further telephone conference with the Examiner on March 12, 2004, the Examiner confirmed receipt of the re-submitted reply to the Final Office Action and indicated that the reply to the Final Office Action would be entered as of the date of initial filing, i.e. December 17, 2003. Thus, Applicant's reply to the Final Office Action was timely filed well before the six-month deadline of March 17, 2004.

On April 6, 2004, Applicant received an Advisory Action dated April 1, 2004 from the PTO (and Applicant has submitted a response to the Advisory Action herein (see Exhibit B)). However, on April 12, 2004, Applicant received a Notice of Abandonment from the PTO dated April 7, 2004, which stated that the above-referenced application was

abandoned for failure to file a timely reply to the Final Office Action dated September 17, 2003. However, as stated above, Applicant did file a timely response to the Final Office Action on December 17, 2003. Furthermore, as a result of the PTO misplacing or losing Applicant's timely filed response to the Final Office Action, Applicant did not received a timely Advisory Action. Thus, through no fault or awareness of the Applicant, the above-referenced application was abandoned.

For the reasons stated above, Applicant respectfully requests that this petition be granted under 37 CFR §1.137(a) and the present application be revived, and that the reply made to the Advisory Action be entered in the present application.

**II. Alternatively, Applicant Respectfully Requests Withdrawal of the Holding of Abandonment and a Refund of this Petition Fee**

In the alternative, and for the reasons stated above, it is requested that the PTO withdraw the holding of abandonment and refund the payment of \$110.00 made herein by crediting same to Applicant's deposit account No. 50-0731. Applicant further requests that the reply made to the Advisory Action (attached as Exhibit B) be entered in the present application.

**III. In the Unlikely Event that Applicants' Alternative Requests Made Above Are Denied, Applicant Respectfully Requests Revival Under 37 CFR §1.137(b)**

In the unlikely event that the enclosed petition is not granted under 37 CFR §1.137(a) and the PTO does not withdraw the holding of abandonment; Applicant, for the reasons that follow, respectfully submits that the above-referenced application was

unintentionally abandoned, and that all requirements of 37 CFR §1.137(b) have been met, and that this petition should be granted.

37 CFR §1.137(b)(1):

See above response to 37 CFR §1.137(a)(1).

37 CFR §1.137(b)(2):

The Commissioner is hereby authorized to charge payment of the amount of \$1,330.00 required under 37 CFR §1.17(m) as the fee for the present petition and to charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 50-0731.

37 CFR §1.137(b)(3):

The entire delay in filing the required reply from the due date for the reply until the filing of this petition was unintentional.

**IV. Conclusion**

For the reasons stated above, Applicant respectfully requests that the enclosed petition be granted under 37 CFR §1.137(a) and the present application be revived, and that the reply made to the Advisory Action be entered in the present application. In the alternative, and for the reasons stated above, it is requested that the PTO withdraw the holding of abandonment and the payment of \$110.00 made herein be credited to Applicant's deposit account. In the unlikely event that the enclosed petition is not granted under 37 CFR §1.137(a) and the PTO does not withdraw the holding of abandonment, Applicant respectfully requests that the enclosed petition be granted under 37 CFR





***Receipt is acknowledged of:***

Response to Final Office Action  
for "Structure And Method For Fabrication Of A  
Leadless Chip Carrier"; Two Copies of the Amendment  
Cover Sheet (2 pages per copy); Amendment and  
Response (6 pages)

Client: Skyworks Solutions, Inc.

Inventor: Hashemi, et al.

Serial No.: 09/878,815

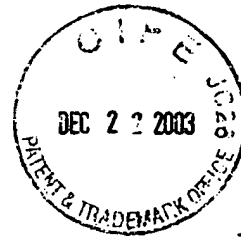
Filing Date: 6/11/2001

Atty: MF

Mailed First Class: December 17, 2003

Attorney Docket No.: 00CON159PC-CIP1

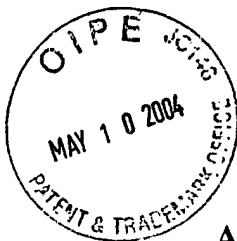
Client Docket No.: 98RSS246C-CIP1



**DOCKETED**

**DEC 30 2003**

W



Attorney Docket No.: 00CON159PC-CIP1

## AMENDMENT COVER SHEET

IN RE APPLICATION OF: Hashemi, et al.

SERIAL NO.: 09/878,815 FILED: June 11, 2001

FOR: Structure and Method for Fabrication of a Leadless Chip Carrier

Mail Stop AF  
HONORABLE COMMISSIONER FOR PATENTS  
P.O. Box 1450, Alexandria, VA 22313-1450

Sir/Madam:

Transmitted herewith is a paper in the above-identified application. Any necessary extension of time period set for this paper is hereby requested.

☒ No additional fee is required.

☐ The fee has been calculated as shown below:

☐ EXTENSION FEE

	RATE Non-Small Entity	RATE Small-Entity	FEE
FIRST MONTH AFTER TIME PERIOD SET	110.00	55.00	\$
SECOND MONTH AFTER TIME PERIOD SET	420.00	210.00	\$
THIRD MONTH AFTER TIME PERIOD SET	950.00	475.00	\$
FOURTH MONTH AFTER TIME PERIOD SET	1,480.00	740.00	\$

☐ TOTAL EXTENSION FEE \$ 0.00

☐ FEE FOR EXTRA CLAIMS added by Amendment in this response:

	Column 1	Column 2	Column 3			
	Number of Claims after Amendment	Number Previously Paid for	Number of Extra Claims	RATE Non-Small Entity	RATE Small Entity	FEE
TOTAL CLAIMS	53	MINUS **71	* = 0	x 18	x 9	\$
INDEPENDENT	3	MINUS ***4	* = 0	x 86	x 43	\$
First presentation of multiple dependent claim				+ 290	+ 145	\$


TOTAL FEE FOR EXTRA CLAIMS \$ 0.00

- \* If the entry in Column 1 is less than the entry of Column 2, write "0" in Column 3.
- \*\* If the number of Total Claims previously paid for is less than 20, write "20" in this space.
- \*\*\* If the number of Independent Claims previously paid for is less than 3, write "3" in this space.



- ☐ Total fee for Supplemental Information Disclosure Statement \$
- ☐ Enclosed is the total fee of \$ 0.00 (Payment by Credit Card, Form PTO-2038 Enclosed).
- ☐ Please charge Deposit Account No. 50-0731 in the amount of \$
- ☒ The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication, or credit any overpayment to Deposit Account No. 50-0731. A duplicate copy of this sheet is enclosed.

Date: 12/17/03

By:   
Michael Farjami, Reg. No. 38,135

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on:

12/17/03  
Date

  
Signature

Sukhrie Bal  
Typed or Printed Name of Person Mailing Paper and/or Fee

Michael Farjami, Esq.  
Farjami & Farjami LLP  
16148 Sand Canyon  
Irvine, CA 92618  
(949) 784-4600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

**Hashemi, et al.**

Serial No.: 09/878,815

Filed: June 11, 2001

For: **Structure And Method For  
Fabrication Of A Leadless Chip  
Carrier**

Art Unit: 2811

Examiner: Owens, Douglas W.

**RESPONSE TO FINAL OFFICE ACTION**

Mail Stop AF  
Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir/Madam:

This is in response to the *Final Office Action* dated September 17, 2003 in the above-referenced patent application. Please enter and consider the following remarks.

### REMARKS

In the Office Action dated September 17, 2003, the Examiner has *finally rejected* claims 1-27, 29, and 31-55 pending in the application on the basis of new ground(s) of rejection and newly cited art. Applicant respectfully requests reconsideration and withdrawal of the finality of the rejection of the Office Action dated September 17, 2003.

A good and sufficient reason why the present response is necessary and was not earlier presented is that an entirely new references have been cited in the present final rejection dated September 17, 2003 (37 CFR §1.116(c)). The new references are Fujisawa et al. (USPN 6,232,650) (hereinafter "Fujisawa") and Hassan S. Hashemi (USPN 6,191,477 B1) (hereinafter "Hashemi '477"), which are for the first time brought to Applicant's attention by means of the present *final rejection* dated September 17, 2003. The new references, i.e. Fujisawa and Hashemi '477, were not cited in the present application prior to the instant final rejection. Since Fujisawa and Hashemi '477 are references upon which the Examiner has now relied, Applicant believes that it would be manifestly unfair for the Patent Office not to consider Applicant's arguments, which are necessitated due to the newly cited references, Fujisawa and Hashemi '477.

The Examiner has rejected claims 1-3 under 35 USC §102(e) as being anticipated by Fujisawa. For the reasons discussed below, Applicant respectfully submits that the present invention, as defined by independent claim 1, is patentably distinguishable over Fujisawa. However, Applicant reserves the right to provide declarations and/or documents under 37 CFR 1.131 to "swear behind" the effective filing date of Fujisawa.

Subject to Applicant's reserved right to establish priority of the present invention under 37 CFR 1.131, Applicant submits that the present invention, as defined by independent claim 1, teaches, among other things, a support pad situated underneath and coupled to a die by a down bonding wire. As disclosed in the present application, since the support pad is connected to a die ground bond pad by a substrate down bond area and a down bonding wire. As a result, the present invention advantageously achieves a minimal length electrical ground connection between the die ground pad and the support pad.

Moreover, as disclosed in the present application, the support pad is connected to a heat spreader by vias situated in the substrate. As a result, the present invention advantageously achieves a low resistance, low inductance, minimal length ground connection between the support pad and the heat spreader. Additionally, by situating the support pad underneath the die and thermally connecting the support pad to the heat spreader by vias, the present invention advantageously provides effective thermal conduction of excess heat away from the die.

In contrast to the present invention as defined by independent claim 1, Fujisawa does not teach, disclose, or suggest a support pad situated underneath and coupled to a die by a down bonding wire. Fujisawa specifically discloses electrode pads 4, which are arranged in the peripheral area of the main surface of base substrate 1 and are arranged along each side of semiconductor chip 10. See, for example, column 6, lines 36-40 and Figures 2, 3, and 4 of Fujisawa. In Fujisawa, each of electrode pads 4 are electrically

connected to each of several external terminals 11 arranged on main face 10A of semiconductor chip 10 through wires 13. See, for example, column 6, lines 40-43 and Figures 2, 3, and 4 of Fujisawa. However, as is clearly shown in Figure 4 of Fujisawa, electrode pads 4, which are electrically connected to external terminals 11 of semiconductor chip 10, are not situated underneath semiconductor chip 10. Although a group of electrode pads 4 in Fujisawa are situated underneath semiconductor chip 10, the group of electrode pads 4 which are situated underneath semiconductor chip 10 are not electrically connected to semiconductor chip 10 by a down bonding wire as required by independent claim 1. Thus, Fujisawa fails to teach, disclose, or suggest a support pad situated underneath and coupled to a die by a down bonding wire.

For all the foregoing reasons, Applicant respectfully submits that the present invention, as defined by independent claim 1, is not suggested, disclosed, or taught by Fujisawa. Thus, independent claim 1 is patentably distinguishable over Fujisawa and, as such, claims 2-3 depending from independent claim 1 are, *a fortiori*, also patentably distinguishable over Fujisawa for at least the reasons presented above and also for additional limitations contained in each dependent claim.

The Examiner has further rejected claims 1-27, 29, and 31-55 under 35 USC §102(e) as being anticipated by Hashemi '477. The present application is a continuation-in-part of, and claims priority from, pending application Serial No. 09/713,834, which was filed November 15, 2000. Pending application Serial No. 09/713,834 is in turn a continuation of Serial No. 09/252,851, filed February 17, 1999 and issued as patent

number 6,191,477. Thus, patent number 6,191,477, i.e. Hashemi '477 cited by the Examiner, is the "grand parent" of the present application.

For these reasons, Applicant respectfully submits that Hashemi '477 is disqualified as prior art under the provisions of 35 USC §102(e). Accordingly, Applicant respectfully submits that the rejection of claims 1-27, 29, and 31-55 under 35 USC §102(e) as being anticipated by Hashemi '477 has been overcome, and that, therefore, claims 1-27, 29, and 31-55 should now be allowed.

Based on the foregoing reasons, the present invention, as defined by independent claims 1, 17, and 44 and claims depending therefrom, is patentably distinguishable over the art cited by the Examiner. Thus, claims 1-27, 29, and 31-55 pending in the present application are patentably distinguishable over the art cited by the Examiner. As such, and for all the foregoing reasons, an early allowance of claims 1-27, 29, and 31-55 pending in the present application is respectfully requested.

Respectfully Submitted,  
FARJAMI & FARJAMI LLP

Date: 12/17/03



Michael Farjami, Esq.  
Reg. No. 38, 135

Michael Farjami, Esq.  
FARJAMI & FARJAMI LLP  
16148 Sand Canyon  
Irvine, California 92618  
Telephone: (949) 784-4600  
Facsimile: (949) 784-4601

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date of Deposit: 12/17/03

Sukhrie Bal  
Name of Person Mailing Paper and/or Fee

[Signature] 12/17/03  
Signature Date